1.Write a program to check following conditions:
i.If number is less than 1,.print 'one digit' on screen.
ii.if number greater than or equal to 10 but less than 100, print 'two digits' on screen.
iii.Otherwise, print 'integer' on screen.?

```c
#include <stdio.h>

int main() {
    int number;

    // Prompt the user to enter a number
    printf("Enter an integer: ");
    scanf("%d", &number);

    // Check the conditions
    if (number < 1) {
        printf("one digit\n");
    } else if (number >= 10 && number < 100) {
        printf("two digits\n");
    } else {
        printf("integer\n");
    }

    return 0;
}
```

2.Write a program to find given year's leap year or not?

```c
#include <stdio.h>

int main() {
    int year;

    // Prompt the user to enter a year
    printf("Enter a year: ");
    scanf("%d", &year);
    // OR if it is divisible by 400.
    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {
        printf("%d is a leap year.\n", year);
    } else {
        printf("%d is not a leap year.\n", year);
    }

    return 0;
}
```

3.Write a program to check whether a character is an alphabet, digit, or special character?

```c
#include <stdio.h>

int main() {
    char ch;

    // Prompt the user to enter a character
    printf("Enter any character: ");
    scanf("%c", &ch);

    // Check if the character is an alphabet
    if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')) {
        printf("'%c' is an Alphabet.\n", ch);
    }
```

```c
        // Check if the character is a digit
        else if (ch >= '0' && ch <= '9') {
            printf("'%c' is a Digit.\n", ch);
        }
        // If not an alphabet or digit, it's a special character
        else {
            printf("'%c' is a Special Character.\n", ch);
        }

        return 0;
}
```

4.Write a program to check whether an alphabet is a vowel or consonant?

```c
#include <stdio.h>
#include <ctype.h> // Required for toupper() function

int main() {
    char ch;

    // Prompt the user to enter an alphabet
    printf("Enter an alphabet: ");
    scanf("%c", &ch);

    // Convert the character to uppercase for easier comparison
    char upper_ch = toupper(ch);

    // Check if the character is an uppercase vowel
    if (upper_ch == 'A' || upper_ch == 'E' || upper_ch == 'I' || upper_ch == 'O' || upper_ch == 'U') {
        printf("'%c' is a Vowel.\n", ch);
    }
    // Check if the character is an alphabet (and not a vowel)
    else if ((upper_ch >= 'A' && upper_ch <= 'Z')) {
        printf("'%c' is a Consonant.\n", ch);
    }
    // If it's not an alphabet
    else {
        printf("'%c' is not an alphabet.\n", ch);
    }

    return 0;
}
```

5.Write a program to read any day number as integer and display name in word format?

```c
#include <stdio.h>

int main() {
    int dayNumber;

    printf("Enter a day number (1-7): ");
    scanf("%d", &dayNumber);

    switch (dayNumber) {
        case 1:
            printf("Sunday\n");
            break;
        case 2:
            printf("Monday\n");
            break;
```

```c
        case 3:
            printf("Tuesday\n");
            break;
        case 4:
            printf("Wednesday\n");
            break;
        case 5:
            printf("Thursday\n");
            break;
        case 6:
            printf("Friday\n");
            break;
        case 7:
            printf("Saturday\n");
            break;
        default:
            printf("Invalid day number\n");
            break;
    }

    return 0;
}
```